

**IN THE CLAIMS:**

Claims 1–6 are pending in the present application. Claims 1, 3 and 6 have been amended herein. A complete listing of pending claims is provided below.

**Listing of Claims:**

1. (Currently Amended) An assay for determining a concentration of total endogenous lactoferrin, said assay comprising:

obtaining a human fecal sample;

diluting said fecal sample;

contacting said sample with immobilized polyclonal antibodies to endogenous lactoferrin to create a treated sample;

contacting said treated sample with enzyme-linked polyclonal antibodies to create a readable sample;

determining the optical density of said readable sample at 450 nm;

generating a purified lactoferrin standard curve and determining a linear portion of the standard curve;

comparing said optical density of said readable sample to said standard curve to determine a concentration of the diluted sample; and

determining whether the concentration of the diluted sample is within the linear portion of the standard curve, wherein if the diluted sample is within the linear portion of the standard curve, determining the concentration of total endogenous lactoferrin in said fecal sample;

comparing said lactoferrin concentration to at least one previously determined lactoferrin concentration for the patient to monitor the inflammatory

bowel disease activity of the patient and determine whether treatment of the inflammatory bowel disease has been effective in decreasing or eliminating gastrointestinal inflammation.

2. (Previously Amended) The assay as recited in claim 1, wherein said step of diluting said fecal sample comprises diluting said sample by serial ten-fold dilutions until a measured result indicates a concentration of fecal lactoferrin that provides an optical density reading at 450 nm that is within a linear portion of the standard curve.

3. (Currently amended) A kit for distinguishing irritable bowel syndrome from inflammatory bowel disease by determining a concentration of total endogenous lactoferrin in a fecal sample from a person to be diagnosed, the kit comprising:

one or more microassay plates, each said plate containing immobilized polyclonal antibodies to human lactoferrin;

enzyme-linked polyclonal antibody to human lactoferrin;

enzyme substrate for color development; and

instructions for performing serial ten-fold dilutions on a fecal sample of a patient and for calculating concentration of lactoferrin in the fecal sample, wherein concentration of the calculated lactoferrin equal to or greater than 7.25  $\mu$ g/ml indicates gastrointestinal inflammation.

4. (Original) The kit as recited in claim 3, further comprising purified human lactoferrin as a positive control.

5. (Original) The kit as recited in claim 4, further comprising a stop solution for quenching the reaction.

6. (Currently Amended) A method for monitoring a patient having inflammatory bowel disease, the method comprising:

obtaining a first fecal sample from the inflammatory bowel disease patient at a first time;

determining the concentration of endogenous lactoferrin in said first fecal sample to obtain a first lactoferrin concentration;

obtaining a second fecal sample from the inflammatory bowel disease patient at a second time after treatment of the patient's inflammatory bowel disease later than said first time;

determining the concentration of endogenous lactoferrin in said second sample to obtain a second lactoferrin concentration; and

comparing said first lactoferrin concentration to said second lactoferrin concentration to determine whether treatment of the inflammatory bowel disease has been effective in decreasing or eliminating gastrointestinal inflammation.~~evaluate any differences therebetween.~~